INFORMATION BULLETIN



FEDERAL COMMUNICATIONS COMMISSION

AM BROADCAST STATION SELF - INSPECTION CHECKLIST

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AM SELF-INSPECTION CHECKLIST

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INTRODUCTION

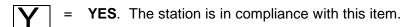
Welcome to the AM Broadcast Station Self-Inspection Checklist.

The Enforcement Bureau (EB) of the FCC is committed to improving licensee compliance with the broadcast regulations. We do this through a combination of educational and enforcement efforts. The enforcement effort usually involves an on-scene station inspection conducted by FCC personnel. Most on-scene inspections are conducted without prior notification to the station licensee.

This checklist has been developed to assist broadcast station management in conducting a self-inspection of their station. It provides an opportunity for the broadcaster to review and correct any deficiencies associated with the operation of a station without an actual on-scene visit by the Commission.

While not all broadcast regulations are covered by this checklist, you will be able to assess your compliance with the most frequently violated broadcast regulations. Each question contains a reference to the relevant rule section(s) to facilitate your review. These references pertain to Title 47 Code of Federal Regulations (C.F.R.) Parts 11, 17 and 73.

The following boxes are provided throughout the checklist to aid the broadcaster in determining the stations compliance:



= The station is not in compliance with this item. Corrective action is **PENDING**.

NOT APPLICABLE to this station. If this response is not provided then this question is applicable to all AM stations.

Please note that all of the above responses are not applicable to every question. Only appropriate responses will be provided for each question.

You will note that the above responses do not include a "NO" answer. Any question in which a "NO" answer is applicable would be a violative condition requiring corrective action. Stations encountering such situations should take immediate steps to correct the problem.

WHERE TO GET ASSISTANCE, FORMS and OTHER INFORMATION

On June 3, 1996, the FCC established a national call center in Gettysburg, Pennsylvania. This call center is operated by the FCC Consumer and Governmental Affairs Bureau (CGB). This facility is capable of providing services for the hearing impaired and the center is staffed full-time with bi-lingual (English and Spanish) Specialists. The toll free telephone number for this call center is 1-888-CALLFCC (1-888-225-5322).

If you have any questions about this self inspection checklist or the applicability of any regulation to your operation, you may contact the FCC Call Center. **DO NOT MAIL THIS CHECKLIST TO THE FCC FOR OUR REVIEW!**

Requests for Emergency Alert System (EAS) related documents should be directed to the Commission's EAS Office at (202) 418-1228. Information on EAS may also be found through the FCC, Enforcement Bureau web page at http://www.fcc.gov/eb/eas.

Requests for any FCC form or bulletin should be directed to the Commission's forms distribution contractor at 1-800-418-FORM (1-800-418-3676). This is a voice mail answering system. You should have the number of the form available when you call.

Some forms, bulletins and other documents, including a copy of this checklist, are also available through the Internet by visiting the FCC Homepage at "http://www.fcc.gov". Please check this Homepage for the latest updates to the checklist. Some forms may also be filed through the use of the Internet.

The FCC, Media Bureau, Audio Division maintains a webpage at "http://www.fcc.gov/mb/audio". This page provides information relating to radio broadcast, including a list of current telephone numbers available for inquiries. Current rules pertaining to AM and FM stations are maintained at "http://www.fcc.gov/mb/audio/bickel/amfmrule.html". Information on EEO requirements for broadcasters are maintained at "http://www.fcc.gov/mb/eeo" or by calling EEO staff at (202)418-1450.

The FCC maintains a fax on demand service at (202)418-2830. Through this service you may obtain information on the following:

Daily Digest
News Releases
Speeches
Fact Sheets
Current List of Events
Public Notices
Auctions

SECTION I: ADMINISTRATIVE AND NON-TECHNICAL

- A. AUTHORIZATIONS: The station license, construction permit, renewal certificate, auxiliary transmitter authorization, special temporary authorization (STA), and/or any other instrument of authorization shall be readily available and easily accessible at the station's principal control point. Renewal certificates should be associated with the corresponding station authorization. [See 73.1230(a), 73.1635, 73.1670, 73.3533, 73.3536, 73.3537 and 73.3539]
 - 1. AUTHORIZATIONS: Are <u>current</u> station authorizations posted or readily available at the principal control point for the station?

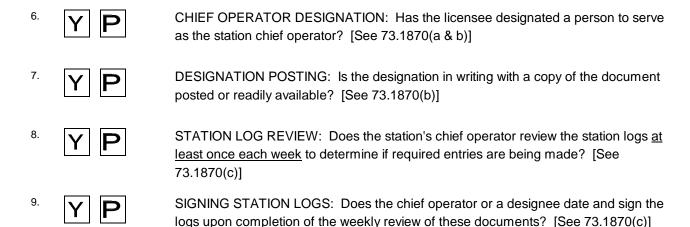
B. STATION LOGS/RECORDS:

STATION LOGS include entries pertaining to equipment status, equipment calibration, the Emergency Alert System (EAS) and, when applicable, the recording of tower light outages. STATION RECORDS include, but are not limited to chief operator designations, equipment performance measurements and AM Directional field strength measurements.

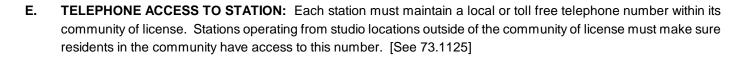
The station logs and records are to be kept in an orderly and legible manner, in suitable form and with sufficient detail. Station logs and records are to be retained for a period of two years, unless specified otherwise, and they shall be made available for inspection or duplication at the request of the FCC or its representatives. Required logs and records are to be readily available for inspection. [See 73.61(a), 73.1225, 73.1226, 73.1590, 73.1800, 73.1820 and 73.1840]

- 2. Y LOGS/RECORDS: Are required station logs retained for a period of 2 years? [See 73.1840(a)]
- 3. AVAILABILITY: Are station logs/records readily available for inspection and/or duplication at the request of the FCC or its representatives? [See 73.1225 and 73.1226]
- 4. P EQUIPMENT PERFORMANCE MEASUREMENTS: Are the latest Equipment Performance Measurements maintained and readily available? [See 73.1590(a)]
- 5. CLARITY: Are the station logs legible and in such detail that they clearly document any problems that may have occurred at the station? [See 73.1800(b)]

C. CHIEF OPERATORS: Each station must designate a chief operator. The designation is to be in writing with a copy posted with the station authorization. Agreements with chief operators serving on a contract basis must be in writing with a copy kept in the station files. The chief operator is to review the station logs at least once each week to determine if required entries are being made correctly and to <u>SIGN AND DATE</u> the log upon completion of the review. The chief operator is also responsible for inspection and calibration of the transmission system, monitors, metering and control systems in addition to any equipment performance measurements or other tests as specified in the rules or terms of station authorization. [See 73.1870]



- D. STATION IDENTIFICATION: Station identification shall be made at the beginning and ending of each period of operation, and hourly, as close to the hour as feasible, at a natural break in program offerings. The identification shall consist of the station's call letters immediately followed by the community of license. Any reference to additional communities must be made after the community of license. The name of the licensee, or the station frequency, channel number, or both, may be inserted between the call letters and community of license. No other insertion is permissible. Simulcasted AM and FM stations may identify jointly if owned by the same licensee. [See 73.1201]
 - 10. Y IDENTIFICATION: Is the station identification made in accordance with 73.1201?

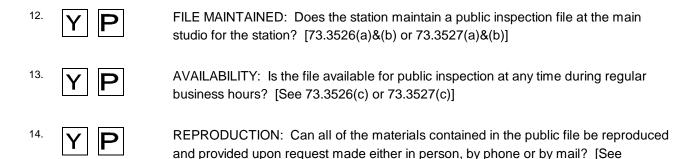


TELEPHONE ACCESS: Does the station maintain a local or toll-free telephone number in its community of license? [See 73.1125(e)]

F. PUBLIC INSPECTION FILE: All stations are to maintain a public inspection file at the main studio of the station. The file shall be available for public inspection at any time during regular business hours. Regular business hours are generally any eight hour period between the hours of 8 a.m. and 6 p.m., Monday through Friday.

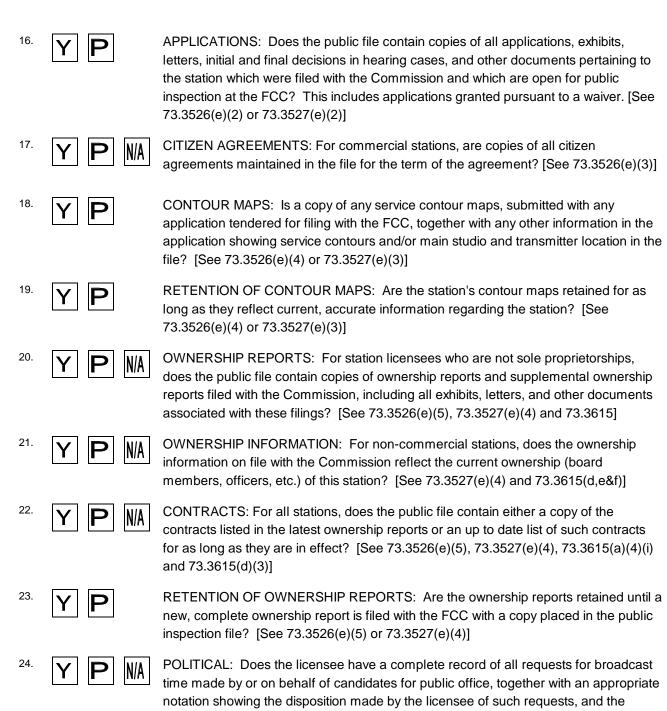
All or part of the file may be maintained in a computer database as long as the computer terminal is made available to members of the public who wish to review it. If a station is concerned about documents being stolen or destroyed, then copies of required documents may be placed into the file in lieu of the originals.

The contents of the file are to be made available within a reasonable time for printing or machine reproduction upon request made in person, provided the requesting party pays the reasonable cost of reproduction. The licensee may require guarantee of payment in advance for any such requests. The licensee shall also mail photocopies of documents from the file upon request made in person, by telephone, by mail or by e-mail, with all postage paid by the station. [See 73.3526 for commercial station public file rules and 73.3527 for non-commercial station public file rules]



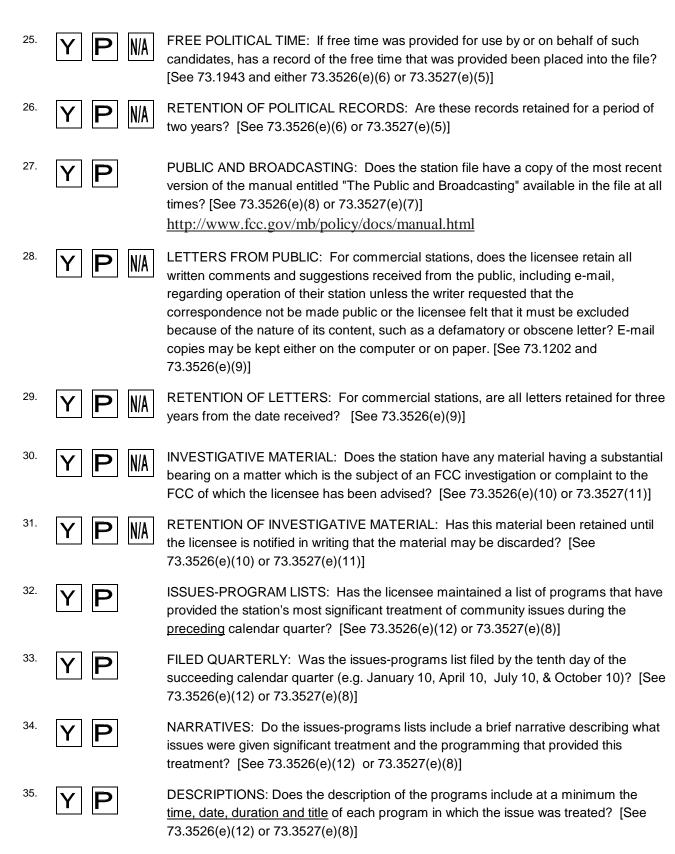
AUTHORIZATION: Is a copy of the current FCC authorization to construct or operate the station being maintained in the file? [See 73.3526(e)(1) or 73.3527(e)(1)]

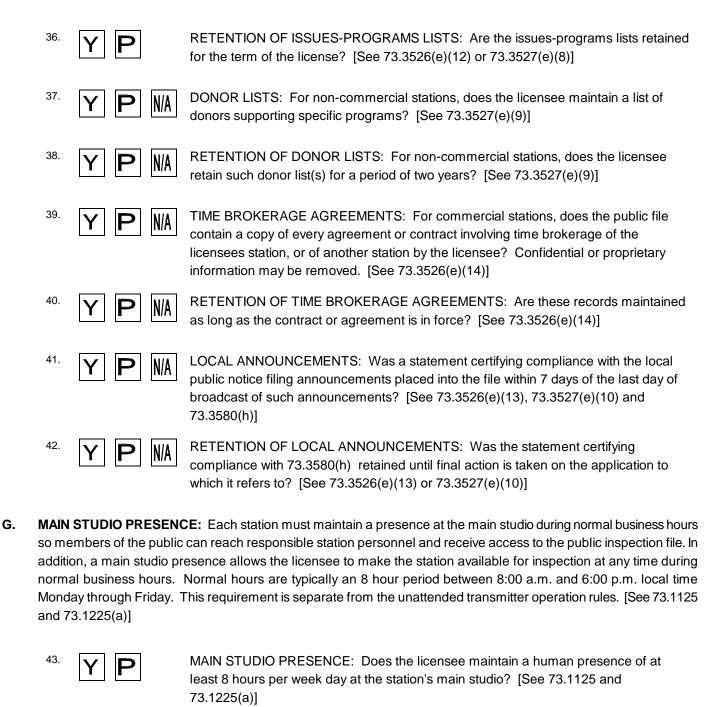
73.3526(c) or 73.3527(c)]



73.3526(e)(6) or 73.3527(e)(5)]

charges made, if any, if the request was granted? [See 73.1943 and either





H. MAIN STUDIO LOCATION: The main studio for each station shall be located within the principal community signal strength contour of any broadcast station licensed to that same community or 25 miles from the reference coordinates of the center of its community of license, whichever the licensee chooses. [See 73.1125]

MAIN STUDIO LOCATION: Is the main studio for this station located within the principal community contour of any station or within 25 miles of the reference center? [See 73.1125]

SECTION II: ANTENNA STRUCTURES

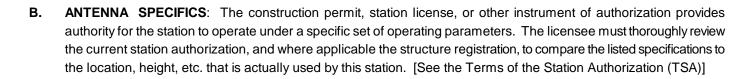
A. ANTENNA REGISTRATION: Most antenna structures that are higher than 60.96 meters (200 feet) above ground level or that may interfere with the flight path of a nearby airport must be studied by the Federal Aviation Administration (FAA) and registered with the FCC. Owners are required to register their non-exempt tower structures with the FCC. All proposed and altered antenna structures must be registered prior to construction or alteration. For licensees this means that the tower must be registered before a new construction permit or license modification involving the tower or antenna is granted.

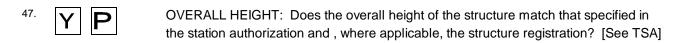
Licensees should be familiar with the painting and lighting specifications shown on their station authorization. In the event that the structure owner is unable to maintain the prescribed painting and lighting, e.g. in cases including but not limited to abandonment, negligence, or bankruptcy, the FCC would require that each tenant licensee on the structure undertake efforts to maintain painting and/or lighting. Additionally, if the licensee has reason to believe that the structure is not in compliance or that the owner is not carrying out its responsibility to maintain the structure, the licensee must immediately notify the owner, notify the site management company (if applicable), notify the FCC, and make a diligent effort to ensure that the antenna structure is brought into compliance.

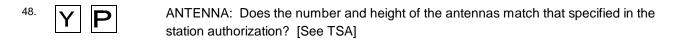
Once a tower (or towers in the case of an AM Directional station) is registered, then the registration number(s) is to be displayed in a conspicuous place that is readily visible near the base of the antenna structure(s). When the tower is located where the number cannot be seen without access to the property on which it is located, then the number should also be placed on the gate or fence leading to the tower where an outside observer can see it. Materials used to display the registration number must be weather-resistant and of sufficient size to be easily seen.

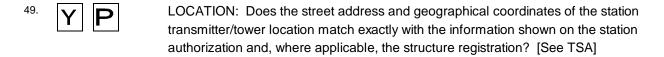
An informational FACT SHEET, PR5000-15, "ANTENNA STRUCTURE REGISTRATION", and the Antenna Structure Registration Form (FCC Form 854), may be obtained by contacting the FCC's Forms Distribution Center at (800)418-3676. This document will provide information on how to register a tower, including information on AM directional arrays. Users may also visit the FCC's Internet Homepage at http://wireless.fcc.gov/antenna/ for up to date information on filing procedures, electronic filing and database access.

- 45. Registration: Has the owner of the tower on which the station antenna is mounted obtained registration for the structure? [See FACT SHEET PR5000-15]
- Posting of Number: Has the registration number been posted in an easily viewed location at the tower site? [See FACT SHEET PR5000-15]







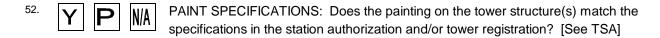


- C. TOWER LIGHT OBSERVATIONS: The lighting on tower structures is to be observed <u>at least once</u> every 24 hours either visually or by observing an automatic indicating device; or alternatively the licensee/tower owner may provide and maintain an automatic alarm system to constantly monitor the lighting on a structure. All automatic or mechanical control devices, indicators, and alarm systems are required to be inspected at intervals <u>NOT TO EXCEED</u> 3 months. [See 17.47]
 - OBSERVATIONS: Is the lighting on the tower(s) observed at least once every 24 hours either visually or by observing an automatic indicating device; or alternatively has the licensee/tower owner provided and maintained an automatic alarm system? [See 17.47]
 - MAINTENANCE CHECKS: Have all automatic and/or mechanical control devices, indicators, and alarm systems associated with the antenna structure lighting been inspected within the last 3 months? [See 17.47]

D. PAINTING/LIGHTING: The station authorization and/or tower registration specifies the painting and lighting requirements for your operation. This is shown as a set of numbers or letters which correspond to paragraphs found on FCC Form 715 (Numbers - For towers with beacons and side lights) or 715A (Letters - For towers with strobed lighting), or on the most current FAA Advisory Circular on Marking and Lighting. If no painting or lighting is required, then the authorization will specify "NONE" or "NONE REQUIRED". Tower registration is only necessary when painting and/or lighting is required.

The licensee must make certain that the number and placement of paint bands and lighting match exactly with that shown on the station authorization and/or tower registration. The licensee/tower owner should also be aware of the requirement to clean or repaint tower structures as often as necessary to maintain good visibility to aircraft. [See Part 17 and TSA]

NOTE: One of the most common problems associated with tower painting is the feedlines that are on the outside legs of a tower. In many cases, the tower is painted correctly, but the solid black colored feedlines defeat the purpose of the painting by covering the outside legs of the tower. The licensee/tower owner should make certain that the feedlines are also painted in such instances. This does not apply in cases where the tower is authorized for strobe lighting.



- PAINT BANDS: Does the structure have the correct number of bands and are the top and bottom bands painted orange? [See Part 17]
- 54. Y LIGHTING SPECIFICATIONS: Does the lighting on the tower structure match exactly with the specifications in the station authorization and/or tower registration? [See TSA]
- **E. FAA NOTIFICATIONS:** The tower owner/licensee is to notify the nearest Federal Aviation Administration (FAA) Flight Service Station within 30 minutes of the observation of an improper functioning or extinguished **top** steady burning light or **ANY** flashing obstruction light regardless of its position on the structure. Such improper functioning beacons include non-lighted beacons as well as those that are lighted, but non-flashing. Notification is to also be made immediately to the FAA once the beacon or steady burning top light is returned to service. Notification is **not** required when side light outages are observed. Tower owners/licensees should insure that the telephone number to the nearest FAA Flight Service Center is readily available and known to all personnel who would be responsible for notifying the FAA of such outages. [See 17.48]
 - FAA NOTIFICATION: Are the tower owner/licensee and all station operators aware of the requirement to notify the nearest FAA Flight Service Station within 30 minutes of the observation of an outage AND to notify the FAA again once the outage is corrected? [See 17.48]

- **F. STATION LOGS:** For all stations operating from a tower owned by the licensee and which have authorizations that specify tower lighting, the licensee/tower owner is to make entries in the station log concerning <u>ANY</u> observed or otherwise known extinguishment or improper functioning of <u>ANY</u> tower light regardless of its position on the tower. [See 17.49, 73.1213 and 73.1820(a)(1)(i)] This log must contain the following:
 - a. The nature of such extinguishment or improper functioning.
 - b. The date and time the extinguishment or improper operation was observed or otherwise noted.
 - c. Date and time of FAA notification, required for outages of any flashing light.
 - d. The date, time and nature of adjustments, repairs or replacements made. This would include any work conducted as part of a system inspection or preventative maintenance program.
 - STATION LOGS: Does the licensee/tower owner maintain a station log containing entries concerning <u>ANY</u> observed or otherwise known extinguishment or improper functioning of <u>ANY</u> tower light? [See 17.49, 73.1213 and 73.1820(a)(1)(i)]

NOTE 1: Licensees should also log the date and time of quarterly inspections of lighting systems as described in §17.47(b).

NOTE 2: Any extinguishment or improper functioning of a required tower light, regardless of its position on the tower, is to be corrected as soon as possible. See §17.49(b) and the terms of the structure registration. A structure is not in compliance with the structure registration if any required light is not functioning properly. However, violations are avoided by prompt and complete logging of the outage and by documenting that the efforts made to correct the condition are being done in a timely manner.

- G. FENCING: For stations utilizing antenna tower(s) having radio frequency (RF) potential at the base (series fed, folded unipole, and insulated base antennas), all towers are to be enclosed within an effective locked fence or other enclosure. Fencing must be capable of preventing access to small children or livestock. The design of the fence must be such that a concerted effort is made to gain access to the tower. [See 73.49]
 - 57. FENCING: Does the station maintain an effective locked fence around all antenna(s) with RF potential at the base? [See 73.49]

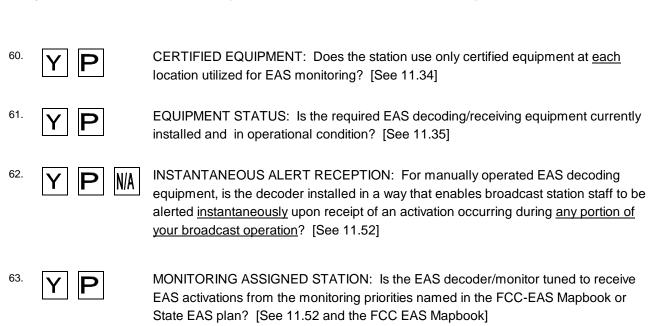
SECTION III: EMERGENCY ALERT SYSTEM (EAS)

On December 9, 1994, the Commission released a Report and Order (10 FCC Rcd 1786) which relocated the Emergency Broadcast System (EBS) rules of Part 73 to the newly established Emergency Alert System (EAS) rules under Part 11. This new rule part reflects the expansion of EAS into other radio services, including cable, along with establishing the move from the analog technology used in EBS to the digital technology used with EAS. On February 26, 2002, the Commission released a Report and Order (FCC 02-64) authorizing certain changes to the EAS rules, which have been incorporated into this document.

All AM broadcast stations must have installed operational EAS equipment capable of sending and receiving the digital EAS protocol. If there are any questions pertaining to the new EAS rules then please contact the Commission's EAS office at (202) 418-1228, by email at eas@fcc.gov, or by visiting the EAS web site at http://www.fcc.gov/eb/eas.

- A. PARTICIPATING vs. NON-PARTICIPATING: The difference between a "Participating" and a "Non-Participating" station occurs during national level Emergency Activation Notification (EAN) alerts. Upon receipt of an EAN the participating station will stay on the air providing necessary information while the non-participating station takes its carrier off the air. All stations are considered participating stations, unless they submit a written request to become a non-participating station, AND they receive a written authorization to that effect. Regardless of their participating or non-participating status, ALL stations are to install and maintain EAS equipment and participate in the weekly and monthly tests of the system. Additionally, all stations are required to monitor for state and local EAS activations. Once a state or local level activation has been received, the station management can then decide whether or not to participate further at that level. [See 11.19, 11.54, 11.55 and the EAS plan for your state]
 - PARTICIPATING: Does the management of this station know whether the station is a participating or non-participating EAS station?
 - **B. HANDBOOK:** All stations are to maintain an EAS Operating Handbook. The handbook is to be available at <u>ALL</u> EAS control points. Please contact 1-800-418-3676, or visit http://www.fcc.gov/eb/eas for copies of the handbook. [See 11.15]
 - HANDBOOK: Does the station have an EAS Operating Handbook available at <u>EACH</u> EAS control point utilized during any portion of the broadcast day? [See 11.15] http://www.fcc.gov/eb/eas

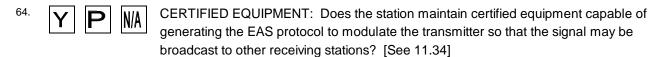
C. EAS DECODER/MONITOR: All AM stations must have equipment installed and capable of decoding, either manually or automatically, the digitally encoded EAS protocol while monitoring at least two assigned EAS stations. This equipment must be operational during all hours of broadcast operation. Manually operated equipment must be located so that operators, at their normal duty stations, can be alerted immediately when EAS messages are received. Only one EAS decoder is required for combined facilities operating from one common location, such as a co-owned and co-located AM and FM studio. All decoder devices are to be certified by the Commission in accordance with Part 2 Subpart J of the Commission's rules. [See 11.31, 11.33, 11.34, 11.35 and 11.52]



NOTE 1: EAS test and activation announcements are to be in the same language as the primary language of the station. [See 11.54(b)(2&7), 11.55(c)(4) and 11.61(a)(1)(v)]

NOTE 2: The Commission released a report and order (FCC 02-64) on February 26, 2002, authorizing the use of selective display and logging of state and local EAS activations and the use of additional alert codes. This same order authorized EAS manufacturers and system operators to upgrade existing systems on an optional basis without need for additional equipment authorizations. The order further requires all EAS units produced after August 1, 2003 to have the additional codes and selective display and logging features installed prior to sale. [See 11.33(a)(4) and the R&O]

D. EAS ENCODER/GENERATOR: All AM stations are to have installed and operational equipment capable of transmitting the digitally encoded EAS protocol. The equipment may be installed for either manual or automatic activation of the generator. If manual activations are used, the EAS encoder must be located so that station staff, at normal duty locations, can initiate the EAS code and Attention Signal transmission. Only one generator is required at combined studio facilities. Any encoder device used for generating the EAS Protocol and Attention Signal must be type accepted. [See 11.34, 11.35 and 11.51]



EQUIPMENT STATUS: Is the required EAS encoding/generating equipment currently installed and operational at this station? [See 11.35]

LOCATION: For manually operated equipment, is the equipment positioned where responsible broadcast staff can initiate an activation during <u>any portion of the broadcast day</u>? [See 11.51]

E. EAS TESTS: All AM stations are to conduct required weekly tests (RWT) of the EAS header and End of Message (EOM) codes a minimum of once a week at <u>random</u> days and times, which can include any time of the day or night. In addition, required monthly tests (RMT) are to be conducted once a month as coordinated by the Emergency Communications Committee for each state. The EAS RWT is optional during the week that an RMT is conducted. The RMT conducted in odd numbered months shall occur between 8:30 a.m. local time and local sunset. The RMT conducted in even numbered months shall occur between local sunset and 8:30 a.m. local time. All RMT's shall be retransmitted within 60 minutes of receipt and include the EAS header, 8-25 seconds of two tone attention signal, entire audio message and EOM code. [See 11.61]

NOTE 1: Since stations are required to monitor two EAS sources, then each station should receive at least one RWT from each of the two sources. The RMT may result in only one test being received during that week.

NOTE 2: If the station is not operating at the time an RMT is scheduled, then the licensee shall log that they were off the air and an RWT should be aired some time during the week after operation of the station resumes.

67. CONDUCT WEEKLY EAS TESTS: Does the station conduct RWT transmission tests of the EAS header and EOM codes a minimum of once a week at <u>random</u> days and times? [See 11.61(a)]

CONDUCT MONTHLY EAS TESTS: Does the station initiate/retransmit RMT tests that include the EAS header, two tone attention signal, audio message and EOM codes as required each month? [See 11.61(a)]

RECEIPT OF EAS TESTS: Did the station receive an EAS test activation during the last full calendar week from each of its two assigned EAS monitoring sources?

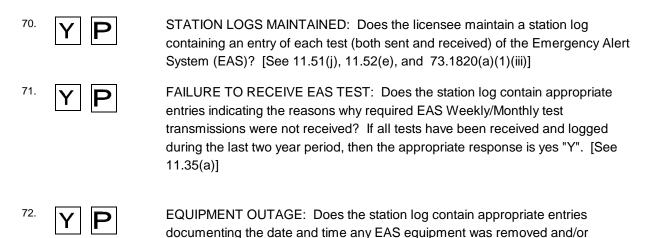
[See 11.61(a)]

F. STATION LOGS: All stations are to maintain a station log containing entries pertaining to each test of the Emergency Alert System that is received or initiated by the station. EAS test entries must be made in the station log either manually by responsible broadcast station staff, or by an automatic device. Stations may keep EAS test data in a special EAS log which can be maintained at any convenient location; however, such log must be considered a part of the official station log. It is also to contain entries which adequately describe the reason why any test activation was not received and any corrective action taken. [See 11.35(a), 11.51(j), 11.52(e), 11.61(b) and 73.1820(a)(1)(iii)]

NOTE: Since monthly tests conducted on even numbered months are to occur between local sunset and 8:30 a.m., then daytime only AM stations may not receive some of the tests. In this case the station will still be required to determine when the test was sent and log the reason why the station did not received the test.

Whenever any EAS equipment becomes defective, the station may operate without the defective equipment, pending its repair or replacement, for a period not in excess of 60 days. The station must make appropriate entries into the station log showing the date and time the equipment was removed and restored to service. [See 11.35(b)]

If the station cannot restore service to the defective equipment within 60 days due to conditions beyond the control of the licensee, then the station must request an extension of this time from the FCC District Director of the area in which the station is located. Such request shall include the steps that were taken to repair or replace the defective equipment, the alternative procedures being used while the defective equipment is out of service and an estimation when the defective equipment will be repaired or replaced. [See 11.35(c)]



NOTE: On February 26, 2002, the Commission released a report and order (FCC 02-64) which allows licensees the option to program their EAS equipment to preselect which EAS messages containing state and local event codes they wish to display and log. Stations will continue to display and log all National level alerts, RWT's, RMT's and any state and local events they elect to receive.

then the appropriate response is yes "Y". [See 11.35(b)]

restored to service? If there have been no such outages in the last two years,

SECTION IV: TECHNICAL REQUIREMENTS

A. **POWER:** All AM stations are to maintain antenna input power between 90% and 105% of that authorized. The power is to be maintained as near as practicable to the station's authorized power. [See 73.1560 and TSA]

In the event that it becomes technically impossible to operate at authorized power, a station may operate at reduced power for a period of not more than 30 days without specific authority from the FCC. If operation at reduced power will exceed 10 consecutive days, a notification must be sent to the FCC, Media Bureau, Washington, D.C. 20554, no later than the 10th day. If normal power is restored prior to the expiration of the 30 day period, the licensee must notify the FCC upon restoration of normal operation.

OPERATING POWER: Is the station's operating power between 90% and 105% of that authorized for each mode of power operation authorized?

[See TSA and 73.1560]

B. DIRECT vs INDIRECT METHOD: The antenna input power of AM stations must be determined using the direct method. However, the indirect method may be used on a temporary basis when it is not possible or appropriate to use the direct method due to technical reasons. The direct method of power determination for an AM station uses either 1) a suitable instrument for determining the antenna's input power directly from the RF voltage, RF current, and phase; or 2) calculating the product of the licensed antenna or common point resistance at the operating frequency and the square of the indicated unmodulated antenna current at that frequency, as measured at the point where the resistance has been determined.

The indirect method is determined by applying the appropriate factor to the input power to the last radio-frequency power amplifier stage of the transmitter, using the following formula:

Transmitter output power = $E_p \times I_p \times F$

Where: $E_p = DC$ input voltage of final radio stage.

I_p = Total DC input current of final radio stage.

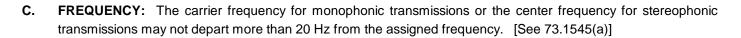
F = Efficiency factor of the transmitter.

The value of the efficiency factor, F, is to be determined and a record of its value is to be maintained and available upon request. [See 73.51]

Licensees must make certain that all duty operators know which method of power determination is being used and how to calculate the output power based on that method.

FFICIENCY FACTOR: Is the efficiency factor known for each transmitter used and a record kept as to its value, along with the source from which this value was

determined? [See 73.51(e) and 73.51(f)]



75. FREQUENCY: Is the station in compliance with the frequency tolerance specified in 73.1545?

- **D. MODULATION:** In no case shall the amplitude modulation of the carrier wave exceed 100% on negative peaks of frequent recurrence, or 125% on positive peaks at any time. [See 73.1570]
 - MODULATION: Is the station in compliance with the modulation limits specified in 73.1570(b)?
- E. TRANSMITTER METERING & CONTROL: All AM stations are to maintain sufficient metering to determine compliance with power, modulation and AM mode of operation. In addition, where applicable, stations may need monitoring devices to determine compliance with antenna tower lighting. AM Directional stations have the further requirement to maintain sufficient metering to monitor parameters of the AM directional antenna system. All stations must have personnel which maintain the ability to turn off the transmitter. [See 73.1350]
 - CONTROL: Does the equipment at this station allow transmitter control personnel the capability of turning off the transmitter at any time the station is in operation? [See 73.1350(b)(2)]
 - OPERATING PARAMETERS: Does the licensee maintain necessary metering to determine compliance with power, modulation and AM mode of operation? [See 73.1350(c)]

NOTE: On March 7, 2001, the Commission released a Report and Order (FCC 01-60) that addressed several items relating to Directional AM operation. That Order authorized licensees the option of maintaining base current metering when other means were available to determine operating power and for maintaining proper directional operation. Prior to this Order, all AM stations were required to maintain a current meter at the base of each antenna element. As stated in the Order, deletion of this requirement would not prevent stations from continuing to use base current ammeters for diagnostic purposes, or as a backup in the event of sampling system or antenna monitor failure.

F. MONITORING PROCEDURES: The licensee must establish monitoring procedures and schedules for the station. Monitoring procedures and schedules must enable the licensee to determine compliance with operating power, modulation levels, AM modes of operation, and where applicable with antenna tower lighting and AM directional antenna parameters. Licensees should be able to provide upon request made by the FCC, the monitoring procedures and schedules they have established for each station.

In the event that an AM broadcast station is operating with a mode of operation not specified by the station license, then the station operation must be terminated within <u>3 minutes</u> or the station output power must be reduced sufficiently to eliminate any excess radiation. This includes AM Directional stations with parameters or monitoring points out of tolerance with the station authorization. [See 73.1350(d)]

In the event that an AM broadcast station is operating with power in excess of 105% of authorized, or with excessive modulation, then station operation is to be terminated within 3 hours, unless corrective action is taken prior to that time. [See 73.1350(d)]

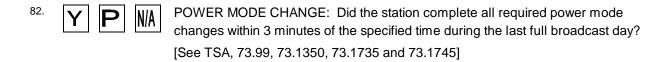
79. SCHEDULES: Has the licensee established procedures and schedules for monitoring the power, modulation and AM mode of operation? [See 73.1350(c)]

- G. CALIBRATION: The licensee must conduct periodic complete inspections of the transmitting system, all required monitors and automatic logging devices to ensure proper station operation. Monitors and automatic logging devices must be periodically calibrated so as to provide reliable indications of transmitter operating parameters with a known degree of accuracy. The determination as to how frequent the complete inspection and calibrations are to occur is up to the licensee. The licensee should make certain that the date of calibration of each device is entered in the station log along with any other resulting actions associated with the calibration, such as replacement of a meter or other device. The licensee may keep calibration data in a special calibration log, however, such log must be considered a part of the official station log and as such must be made available upon request. [See 73.1350(c), 73.1580 and 73.1820(a)(2)(iii)]
 - 80. CALIBRATION: Has the licensee established procedures and schedules for conducting periodic inspection of the transmitting system and all monitors, and to periodically calibrate these devices? [See 73.1350(c) and 73.1580]
 - 81. LOGGING: Are the results of such calibration entered into the station log? [See 73.1820(a)(2)(iii)]

H. POWER CHANGES: Most AM stations utilize more than one power mode of operation. In addition to the normal authorized daytime power many stations operate under the reduced power presunrise service authorization (PSRA) and postsunset service authorization (PSSA) allowed in accordance with §73.99. Some stations will have reduced power nighttime operating authority and a few stations have a specified critical hours reduced power authorization. The times when power changes are to occur are clearly shown on the station authorization and in readily available sunrise/sunset tables. (See http://www.fcc.gov/mb/audio/bickel/srsstime.html for a table of the sunrise/sunset times for your area). Any unauthorized departure from an operating schedule will be considered as a violation of a material term of the license. [See 73.99, 73.1735 and 73.1745(a&b)]

It is the responsibility of the licensee to maintain calibrated time keeping devices, power switching devices and other equipment necessary for the timely change in power to occur as authorized. In addition, should the station be operated with more power than authorized for that time of day, then all operation is to be terminated within 3 minutes. [See 73.1350 paragraphs (a) and (d)(2)]

The logging of power mode changes is not required unless the station is operating out-of-tolerance with any operating parameter. However, licensees are encouraged to do so.



I. GROUND RADIALS: Stations utilizing a vertical radiator with its base on the ground have ground systems that consist of buried radial wires at least one-fourth wave length long. The station authorization will typically specify the number and length of ground radials and whether or not they are to be buried.

NOTE: Ground erosion and construction in and around the radial field are common causes for radials to become exposed. Licensee's should take whatever steps necessary to keep radials intact and buried as specified in the terms of the station authorization.

83. RADIALS: Do the ground radials for all radiators appear to be intact and buried in accordance with the station authorization? [See TSA, 73.189(b)]

SECTION V: ATTENDED VS UNATTENDED OPERATION

A. ATTENDED VS UNATTENDED: Broadcast stations may be operated as either attended or unattended facilities. No prior FCC approval is required to operate a station in the unattended mode. Regardless of which method of station operation is employed, licensees must employ procedures which will ensure compliance with the EAS rules. [See 73.1300]

ATTENDED OPERATION: Attended operation consists of ongoing supervision of the transmission facilities by a station employee or other person designated by the licensee either at the transmitter site, a remote control point, or an ATS control point. Such supervision may be by direct observation and control of the transmitting system by a live person at the transmitter site or remote control point, or such supervision can be by automated equipment that is configured to contact a person designated by the licensee. In either case a live person must be on duty at a <u>FIXED</u> location during all hours of broadcast operation where they can turn off the transmitter and where they can either monitor the station operating parameters themselves or be contacted by the automated equipment which is monitoring the equipment for them. During attended operation it is expected that the transmitter will be turned off by station personnel within 3 hours of an overpower or overmodulation condition (within 3 minutes for operation with an incorrect mode or directional pattern for that time of day) that can cause interference that cannot be corrected within that period of time. [See 73.1350 and 73.1400(a)]

UNATTENDED OPERATION: Unattended operation consists of using self-monitoring or automatic transmission system (ATS) monitoring equipment to control the transmission system, or alternatively, operation in the absence of constant human supervision with equipment that can operate for prolonged periods of time within assigned tolerances. In the former case, equipment must be configured to automatically take the station off the air within the required 3 hour or 3 minute time periods after an out-of-tolerance condition arises. In the latter case, the licensee is required to make certain that the station is monitored frequently enough to ensure that station operation is corrected or terminated within the designated 3 hour or 3 minute time limits, but constant human supervision is not required. [See 73.1350(c) and 73.1400(b)]

NOTE 1: The unattended transmitter operation rules are separate from the main studio presence requirements. Please do not confuse the two. Stations operating in an unattended transmitter monitoring mode are still required to maintain a human presence at the main studio during normal business hours.

NOTE 2: A Media Bureau Fact Sheet on Unattended Operation may be found on the Internet at http://www.fcc.gov/mb/audio/bickel/noonehome.html.

84. **Y P N**/A

UNATTENDED: Does the licensee maintain either automated equipment or periodic human monitoring that enables station operation to be corrected or terminated within 3 hours (or 3 minutes) after an out-of-tolerance condition arises? [See 73.1350(c) and 73.1400(b)]

ATTENDED: Does the licensee maintain a person on duty at a fixed location during all periods that the station is on the air where they can either monitor and control the station themselves or be contacted by automated transmitter monitoring equipment within 3 hours (or 3 minutes) after an out-of-tolerance condition arises? [See 73.1350(c) and 73.1400(a)]

B. NOTIFICATION: Whenever a transmission system control point is established at a location other than at the main studio or transmitter, then notification of that location must be sent to the FCC, Media Bureau, Washington, D.C. 20554, within 3 days of the initial use of that point. This notification is not required if responsible station personnel can be contacted at the transmitter or studio site during hours of operation. [See 73.1350]

NOTE: Notification of an alternate control point should be a separate notification and not a part of another action or notification you are sending to the Commission. An informal letter is sufficient notification. Please make certain that the letter includes the complete street address of the control point as well as a telephone number. The licensee should also include the hours that this point is normally being used as the control point.

NOTIFICATION: Has the licensee notified the Media Bureau in writing of the location of all transmission system control points other than the main studio or transmitter location? [See 73.1350(g)]

87. Y STATION RECORDS: Is a copy of this notification available in the station records?

SECTION VI: LOCAL MARKETING AGREEMENT (LMA)

DEFINITION:

"Time brokerage", also known as "Local Marketing Agreement" or "LMA", is the sale by a licensee of discrete blocks of time to a "broker" that supplies the programming and commercial spot announcements to fill that time.

A. LMA STATUS:





LMA STATUS: Has this station been engaged in a time brokerage agreement during any portion the current term of the station authorization?

NOTE: If this station has not been engaged in a time brokerage agreement during any part of the current term of the station license or other authorization, then you are not required to answer any further questions contained in this section (Section VI).

B. FILING OF CONTRACTS: All stations involved in an LMA must file a copy of the agreement in the stations public inspection file. In addition, the LMA agreement must be filed with the FCC, Media Bureau, Washington, D.C. 20554, within 30 days of execution if a licensee in the same market is brokering the station and providing more that 15 percent of the time on the brokered station. Confidential or proprietary information may be marked out in the copies placed in the public inspection file and this same information may be marked out in the copies filed with the Commission, however, such information shall be made available for inspection upon request by the FCC. [See 73.3526(e)(14) and 73.3613(d)]

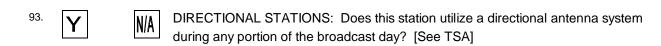
A <u>list</u> of all contracts still in effect, which are required to be filed with the FCC in accordance with 73.3613, are to be filed with the ownership report. This list shall include the date of execution and the expiration of each contract and the list shall document any interest which the licensee may have in any other broadcast station. [See 73.3615(a)(4)]

- 89. **Y P MA** FILING: Has the licensee submitted a copy of the LMA to the FCC within 30 days of execution of the agreement?
- 90. LISTS: Has the licensee provided a list of all contracts in effect along with the ownership report?

- C. CONTROL OF THE STATION: There is no exact formula by which control of a broadcast station can be determined. However, the FCC has traditionally held that the licensee has ultimate responsibility over essential station matters, such as personnel, programming and finances. Licensees are required to maintain control of their stations regardless of who is brokering the station. [See Title 47 United States Code Section 310(d) and 73.3540]
 - 91. Y CONTROL: Has the licensee maintained control over this station?
- **D. MAIN STUDIO:** Licensees are required to maintain a meaningful management and staff presence at stations, even when they are engaged in an LMA. The Commission has interpreted this to mean full-time managerial and full-time staff personnel are to be employed and present at the station during normal business hours. Normal business hours are generally any eight hour period between 8:00 a.m. and 6:00 p.m. local time, Monday through Friday. [See 73.1125]
 - PRESENCE: Does the licensee maintain full-time managerial and staff personnel at the station during normal business hours when the station is brokered?

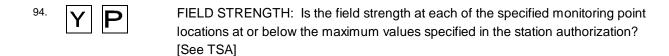
SECTION VII: AM DIRECTIONAL STATIONS

A. DIRECTIONAL OPERATION



NOTE: If this station does not utilize a directional antenna system during any part of the broadcast day, then you are not required to answer any further questions contained in this section (Section VII).

B. FIELD STRENGTH MEASUREMENTS: Unless the station authorization specifies otherwise, each directional AM station is to conduct measurements of the field strength at each monitoring point location specified in the station authorization. These measurements are to be taken as often as necessary to ensure that the radiated field at those points does not exceed the values specified in the station authorization. The field strength values specified in the station authorization are maximum values which are not to be exceeded without specific written authority from the Commission. Additionally, stations not having an approved sampling system must make the measurements once each calendar quarter at intervals not exceeding 120 days. If the licensee has reason to believe that the radiated field at any point is exceeding the authorized limits, then the licensee must conduct partial proof of performance measurements. [See 73.61 and 73.154]



C. MONITORING POINT ROUTING: When the descriptive routing to reach any of the monitoring points as shown on the authorization is no longer correct, the station must file a letter with the Media Bureau, Audio Division, FCC, Washington, D.C. 20554 containing a corrected description. A corrected license authorization will not be issued solely for this change. A copy of this letter must be maintained with the station's files. Licensees should make certain each point can be located based solely on the description provided in the letter. [See 73.158 and TSA]

PS. ROUTING: Do the descriptions shown in the current station authorization accurately document the routing necessary to reach all specified monitoring point locations, including current road designations and landmarks? [See 73.158(b) and TSA]

D. METERING: All directional AM stations are to maintain sufficient metering for the observation of each directional parameter specified in the station authorization. For attended operations, stations are to maintain sufficient directional system parameter monitoring and control capability to ensure compliance with the station authorization at all duty operator locations. An FCC authorized antenna monitor, which is either type approved or notified by the FCC, must be installed at the transmitter site. [See 73.53, 73.57, 73.58, 73.62, 73.69, 73.1350 and 73.1400]



ANTENNA METERING: Does the station maintain sufficient metering to ensure compliance with all directional parameters? [See 73.1350(c) and 73.1400]



APPROVED MONITOR: Is the station utilizing an FCC authorized antenna monitor at the transmitter site? [See 73.53 and 73.69]

NOTE: On March 7, 2001, the Commission released a Report and Order (FCC 01-60) that addressed several items relating to Directional AM operation. That Order authorized licensees the option of maintaining base current metering when other means were available to determine operating power and for maintaining proper directional operation. Prior to this Order, all AM stations were required to maintain a current meter at the base of each antenna element. As stated in the Order, deletion of this requirement would not prevent stations from continuing to use base current ammeters for diagnostic purposes, or as a backup in the event of sampling system or antenna monitor failure.

E. DIRECTIONAL PARAMETERS: Stations operating a directional antenna system must maintain the indicated relative amplitudes of the antenna base currents and antenna monitor (loop) currents within 5% of authorized, unless other tolerances are specified in the station authorization. Most licenses specify a current <u>ratio</u> instead of individual current values. Stations must maintain any specified current ratio within 5% of authorized. Additionally, each directional AM station must maintain the indicated relative phase currents within 3 degrees of that shown on the station authorization for all modes of operation.

Whenever periods of inclement weather or severe climatic conditions make it impossible to maintain the operating parameters (phase, monitor, and base current indications) within tolerance, then the station may operate with parameters at variance for up to 10 days without approval of the FCC. Appropriate entries must be made into the station log documenting these conditions. If the station parameters are at variance for any other reason or if the weather related conditions have continued for 10 days, then the station must request special temporary authority (STA) from the FCC, Media Bureau, Washington, D.C. 20554. [See 73.62 and TSA]

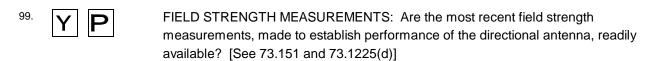
NOTE: The station must continue to maintain all monitoring point radiated field strength values within that authorized. If the radiated field strength at any point is in excess of the maximum authorized on the TSA, then the station must reduce power or make other necessary adjustments to bring the field strength at that point back into compliance with the TSA.

98.



DIRECTIONAL PARAMETERS: Are all base current ratios, antenna monitor loop current ratios, and relative phase currents for all modes of operation within the tolerances specified in 73.62 and the TSA? If station is currently operating under an STA to operate with parameters at variance, then the appropriate response to this question is to mark the "Y" (Yes) box.

F. STATION RECORDS: The most recent field strength measurements made to establish the performance of the directional antenna (including all directional patterns of operation) and the most recent partial proof of performance of the directional antenna are to be maintained in the station records and made available upon request. [See 73.151, 73.154 and 73.1225]



PROOFS: Are the most recent partial directional antenna proof of performance measurements readily available? [See 73.154 and 73.1225(d)]

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VIII. ABBREVIATIONS

AM - Amplitude Modulation

ANSI - American National Standards Institute

ATS - Automatic Transmission System

dB - Decibel

EAS - Emergency Alert System

EFM - Educational FM Station

ERP - Effective Radiated Power

F - Transmitter Efficiency Factor

FAA - Federal Aviation Administration

FCC - Federal Communications Commission

FM - Frequency Modulation

kHz - Kilohertz

LMA - Local Marketing Agreement

MHz - Megahertz

NRSC - National Radio Systems Committee

RF - Radio Frequency

RMT - Required Monthly Test (EAS)

RPU - Remote Pickup Unit

RWT - Required Weekly Test (EAS)

SCA - Subsidiary Communications Authorization

STA - Special Temporary Authority

TPO - Transmitter Power Output

TSA - Terms of the Station Authorization

TV - Television Broadcast

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IX. GLOSSARY OF BROADCAST TERMS

| Amplitude Modulation (AM) | - A type of transmission used in the standard radio broadcast band at 535-1705 kilohertz. |
|------------------------------------|--|
| Antenna Proof | - See Proof of Performance Measurements |
| Bandwidth | - The amount of frequency spectrum a radio signal occupies. |
| EAS Attention Signal | An audio signal using the two tone frequencies of 853 and 960 Hz which is transmitted by an EAS station to actuate muted receivers for interstation receipt of emergency cuing announcements and broadcasts. |
| EAS Operating Handbook | - A booklet which states in summary form the actions to be taken by station personnel upon receipt of emergency action notification, termination, or test messages. |
| EAS Generator/Encoder | - Equipment capable of generating the EAS attention signal for transmission. |
| EAS Monitor/Decoder | - Equipment capable of receiving the EAS attention signal and emergency programming transmitted by other EAS stations. |
| EAS Tests | Tests conducted weekly/monthly by broadcast stations to ensure that their EAS equipment is functioning properly and that station personnel are familiar with the use of these devices. |
| Equipment Performance Measurements | - Measurements performed to determine the overall performance characteristics of a broadcast transmission system from point of program origination to sampling of signal as radiated. |
| Experimental Period | - The time between 12 midnight local time and local sunrise, used by AM broadcast stations for tests, maintenance and experimentation. |

| Extension Metering | - | The meters used to provide indications of a sampled parameter of a broadcast station transmitting system. To be considered an extension meter and not a remote meter, it must be less than 100 feet from the transmitter and installed in the same building as the transmitter. |
|--|---|---|
| Field Strength | - | Electric field intensity, usually measured in millivolts per meter (mV/m) or in decibels above 1 microvolt per meter (dBu). |
| Frequency Modulation (FM) | - | A method of modulation where the amplitude remains constant and the frequency of the carrier wave is varied according to the modulating wave. The FM broadcast band covers 88-108 Megahertz. |
| Local Marketing Agreement (LMA) | - | See Time Brokerage |
| NRSC-1 | - | An audio pre-emphasis standard for AM stations which was implemented June 30, 1990. The pre-emphasis generally is obtained by using special "NRSC-1-equipped" audio processing equipment or a special NRSC-1 audio "filter". |
| NRSC-2 | - | An emission standard for AM stations aimed at attenuating AM sideband energy beyond 10 kHz of the assigned carrier frequency. This standard was implemented June 30, 1994. |
| Output Power | - | The radio frequency output power of a transmitter's final radio frequency stage as measured at the output terminal while connected to a load. Often referred to as TPO. |
| Postsunset Service Authority (PSSA) | - | Allows reduced power AM station operation for two hours after local sunset times specified in the station authorization. |
| Proof of Performance Measurements (Proofs) | - | The measurements of field strengths made to determine the radiation pattern or characteristics of an AM directional antenna system. |
| Presunrise Service Authority (PSRA) | - | Allows reduced power AM station operation from 6 a.m. until local sunrise times specified in the station authorization. |
| Public Inspection File | - | A publicly accessible file to be maintained by broadcast stations which contains documents pertaining to the station's licensing, ownership, and operation. |

Remote Control

Operation by a properly designated person on duty at a control
position from which the transmitter is not visible but that position is
equipped with suitable controls so that essential functions can be
performed.

Spurious Emissions

- An emission on a frequency or frequencies which are outside the necessary bandwidth and the level of which may be reduced without affecting the corresponding transmission of information. Spurious emissions include harmonic emissions, parasitic emissions, intermodulation products and frequency conversion products.

Station Authorization

- Any construction permit, license, special temporary authority, or any other authorization issued by the FCC.

Time Brokerage

- Sale by a licensee of discrete blocks of time to a broker who then supplies the programming to fill that time and sells the commercial spot announcements to support it.

Unattended Operation

 Operation of a station by automatic means without the attention of a qualified operator.